

REMARKS

Applicant respectfully requests reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

Claims 12 and 13 are requested to be cancelled. Claims 1, 5-8, 11, 17-20, and 22 are currently being amended. No claims are being added. Accordingly, claims 1-11 and 14-29 are submitted for reconsideration. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier.

Applicant appreciates the indication of allowable subject matter in claims 13 and 28. By this Amendment, claim 11 has been amended to correspond to canceled claim 13 in independent form. Accordingly, Applicant submits that claim 11, as well as claims 14-21 depending therefrom, are in *prima facie* condition for allowance.

In the Office Action, claims 5-8 and 17-20 were objected to under 37 C.F.R. § 1.75(a) as failing to particularly point out and distinctly claim the subject matter which the applicant regards as his invention or discovery. By this Amendment, Applicant has amended claims 5-8 and 17-20 to address the corrections required by the objection. Applicant thus submits that claims 5-8 and 17-20 are in conformance with 37 C.F.R. § 1.75(a).

Claims 1, 5, 6, 8, 9, and 22 were rejected under 35 U.S.C. § 102(b) as being anticipated by Otani (Patent Application No. EP 0 880 010). Claim 1, as amended, recites that a stereo image measuring device comprises a setting unit for setting at least a part of the points of measurement as division points, for a stereo image including three or more points of measurement for which position data are obtained, , and then setting a triangular search area based on three division points selected from a plurality of the set division points. Claim 1 further recites that the device comprises an arithmetic operation unit for executing correlation processing for images of search areas corresponding to each other on the stereo image based on the search area set by the setting unit, and a measuring unit for measuring a coordinate of a point in a given position from a result of the correlation executed by the arithmetic operation unit.

Otani (which is commonly assigned with the present application) discloses that characteristic patterns are projected from a characteristic pattern projecting portion onto a subject for measurement 0, and the image of the subject for measurement 0 is taken by a left and a right picture taking portion 1 and 2 (page 4, lines 48-51). The image data transferred from the left and right image taking portions 1 and 2 are converted into digital data and transferred to an image memory 51 for characteristic pattern projection of the characteristic pattern projection of the characteristic pattern extracting portion 5 (page 5, lines 2-4). Further, images having no characteristic patterns are taken by the left and right image taking portions 1 and 2, and the digital data is sent to an image memory 52 for images having no characteristic patterns of the characteristic pattern extracting portion (page 5, lines 5-8). A difference calculation is performed between the images in memories 51 and 52, and the difference image is stored in characteristic pattern image memory 54, which is mark image data (page 5, lines 9-15). Characteristic coordinate positions in the memory 54 are detected by a characteristic pattern position detecting portion 55 based on characteristic patterns 20 (page 5, lines 21-25).

In order to perform orientation, detection of the mark image positions provided by the characteristic pattern projection is carried out (page 5, lines 19-20). Otani discloses several position detection processes (page 5, lines 36 – page 6, line 33). Otani further discloses that an orientation process is applied to the detected position data to obtain parameters used by a stereo model coordinate system to make a stereo view (page 6, line 35 – page 7, line 30). A search area is defined as a rectangular portion in accordance with four points of the characteristic patterns (page 8, lines 2-13).

As recited in claim 1, a triangular search area is set based on three division points selected from a plurality of the set division points. Further, the division points are at least a part of points of measurement having position data thereof obtained, i.e., the measurement points are known positions (also see, for example, page 13, lines 5-17 of the description). Accordingly, the triangular search area defined by three division points is also based on known position data.

Thus, in contrast to claim 1, Otani fails to disclose or suggest a setting unit for setting at least a part of the points of measurement as division points, and then setting a triangular search area based on three division points. Rather, Otani discloses that the search area is defined by points of a characteristic pattern projected onto an image before a picture of the image is taken. Otani does not disclose or suggest, however, that the points of the characteristic pattern are measured, and therefore they are not known points. Further, Otani fails to disclose or suggest that the search area is triangular. Rather, Otani discloses that the search area is rectangular. Accordingly, for all of these reasons, claim 1 is patentably distinguishable from Otani.

Claims 5, 6, 8, and 9 are patentably distinguishable from Otani by virtue of at least their dependence from claim 1, as well as their additional recitations. Claim 22 is patentably distinguishable from Otani for reasons analogous to claim 1.

Claims 2, 3, 23, and 24 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Otani and Tanaka et al. (U.S. Patent No. 5,943,442). Even if combinable, Tanaka fails to cure the deficiencies of Otani. Like Otani, Tanaka fails to disclose or suggest a setting unit for setting at least a part of the points of measurement as division points, and then setting a triangular search area based on three division points. Rather, like Otani, the points used to define the search area in Tanaka are not measured and are therefore not known positions. Accordingly, claims 2-3 and 23-24 are patentably distinguishable from any combination of Otani and Tanaka by virtue of at least their dependence from claims 1 and 22, respectively, as well as their additional recitations.

Claims 4, 7, 10, 11, 12, 14, 15, 17-21, 25-27, and 29 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Otani and Binns et al. (U.S. Patent No. 6,041,140). The rejection of claims 11, 12 (now canceled), 14, 15, and 17-21 is now moot in view of the amendment to claim 11, as discussed above. With respect to the other rejected claims, Binns, even if combinable, fails to cure the deficiencies of Otani. Like Otani, Binns fails to disclose or suggest a setting unit for setting at least a part of the points of measurement as division points, and then setting a triangular search area based on three division points. Rather, like Otani, the points used to define the search area in Binns are not

measured and are therefore not known positions. Accordingly, claims 4, 7, 10, 25-27, and 29 are patentably distinguishable from any combination of Otani and Tanaka by virtue of at least their dependence from either claim 1 or claim 22, as well as their additional recitations.

Lastly, claim 16 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Otani and Binns, and further in view of Tanaka. This rejection is moot in view of the amendment to claim 11, from which claim 16 now depends.

Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

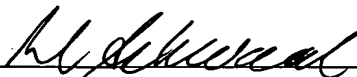
The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

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By



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